SK8-0524036560-2F2F-A9

SP8T PIN Switch with TTL Driver, Absorptive, 0.5 to 40 GHz, 3-Bit Control

SK8-0524036560-2F2F-A9 is an absorptive PIN diode based, single pole, eight throw switch with a TTL driver that operates between 0.5 and 40 GHz. The switch requires a separate -5 V and +5 V biasing in addition to the 3-bit TTL control. This model offers a small form factor, typical 6.5 dB insertion loss, and 50 dB minimum isolation with a switching speed up to 50 nanoseconds. The switch has 2.4 mm female connectosr for all RF ports and Micro-D15 socket for bias and TTL control.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	0.5 GHz		40 GHz
Insertion Loss		6.5 dB	8.5 dB
Isolation		60 dB	
Return Loss	6 dB	7.5 dB	
Damage RF Input Power			+23 dBm
Bias (Positive)	+4.75 V_{DC}	+5.0 V_{DC}/350 mA	+5.25 V_{DC}
Bias (Negative)	-5.25 V_{DC}	-5.0 V_{DC}/50 mA	-4.75 V_{DC}
Control		3-Bit TTL	
Switching Speed		100 ns	
Switch Type		Absorptive	
Specification Temperature		+25 °C	
Operating Temperature	-25 °C		+85 °C

Mechanical Specifications:

Item	Specification
RF Ports	2.4 mm Female
Bias & Control Interface	Micro-D15 Socket (Female)
Case Material	Aluminum
Finish	Gold Plated
Outline	K8-AC-Z3

ECCN

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FEATURES

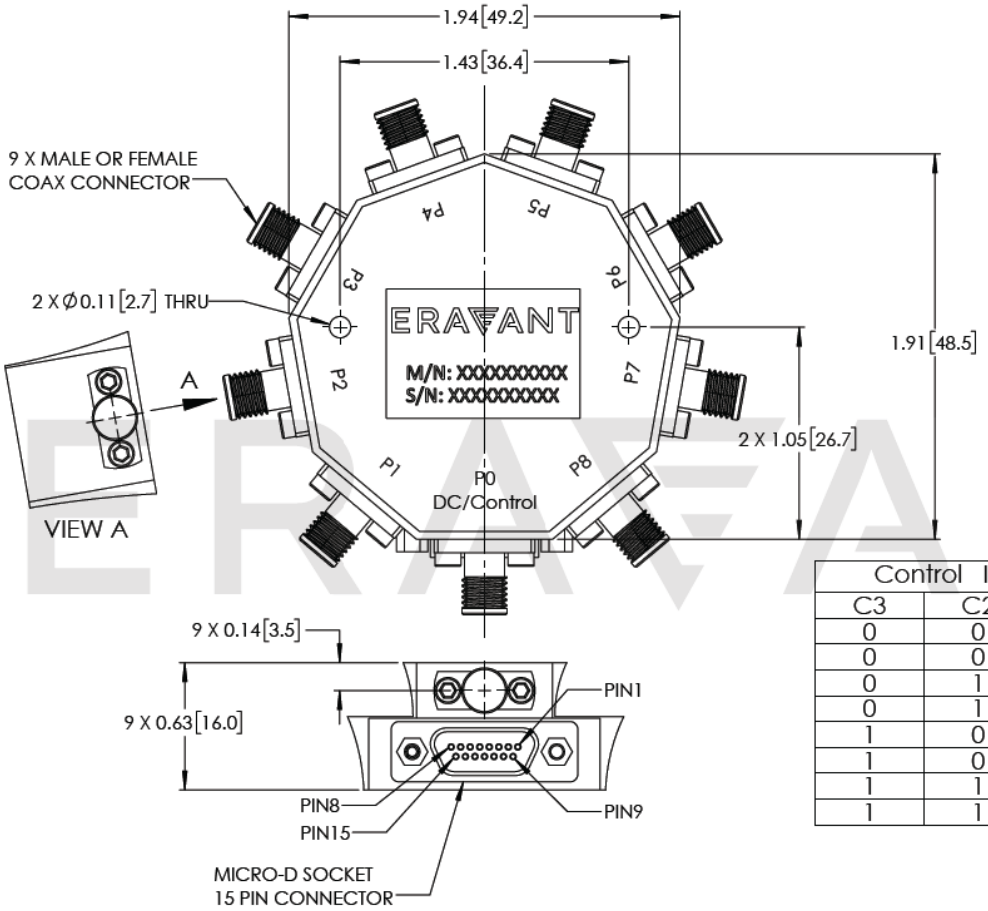
- Low Insertion Loss
- High Isolation
- Absorptive
- TTL Controlled

APPLICATIONS

- Radar Systems
- Communication Systems
- Automatic Test Equipment
- Switching Network

SUPPLEMENTAL DETAILS

Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



MicroD-15P-Female	
1	+5V
2	-5V
3	GND
4	C1
5	C2
6	C3
7	NC
8	NC
9	NC
10	NC
11	NC
12-15	NC

Control Input TTL			Signal Path State
C3	C2	C1	
0	0	0	P0-P1
0	0	1	P0-P2
0	1	0	P0-P3
0	1	1	P0-P4
1	0	0	P0-P5
1	0	1	P0-P6
1	1	0	P0-P7
1	1	1	P0-P8

NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Other mechanical configurations are available under different model numbers.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Exceeding absolute maximum ratings shown will damage the device.
- The control signal per the true table is needed all time to keep the switch under normal working condition. No control signal applied any time could cause excessive negative current, which may damage the switch.
- The device is static sensitive. Always follow ESD rules when working with the device.
- Reversing polarity will destroy the device.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended.